



# UNITED STATES PATENT AND TRADEMARK OFFICE

95  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,592	03/21/2001	Daniel J. Lubera	0275M-000320/CPA	3509

27572 7590 07/02/2002

HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. BOX 828  
BLOOMFIELD HILLS, MI 48303

EXAMINER

RODRIGUEZ, RUTH C

ART UNIT	PAPER NUMBER
----------	--------------

3677

DATE MAILED: 07/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/813,592

Applicant(s)

LUBERA ET AL.

Examiner

Ruth C. Rodriguez

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 38-40 is/are allowed.
- 6) ☐ Claim(s) 1,2,5-8,17,20,21,23-37,41-56 and 156 is/are rejected.
- 7) ☒ Claim(s) 3,4,9-14,18,19 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1, 2, 5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Postadan et al. (US 6,095,734) in view of Dean (US 2,181,966).

Postadan discloses a resilient clip (10) for use in securing a first member (40,70) to a second member (50,80,160) (Figs. 4, 5 and 7). The resilient clip comprising a flange portion (14), an inserting portion (36) and a retaining portion (24). The flange portion has an aperture (16) to receive a threaded fastener (22,140) to couple the second member to the flange portion (Figs. 4, 5 and 7). The insertion portion is configured to be inserted into a hole (42,72) formed into the first member (Figs. 4,5 and 7). The inserting portion is coupled to the flange portion. The retaining portion is coupled to the insertion portion and has first and second wing members (24a,24b). The first and second wing members have a tip portion. The tip portion (39a) of the first wing member and the tip portion (39b) of the second wing member are configured to co-engage with the first member (Fig. 4 and 5). Each of the first and second axes are generally parallel a longitudinal axis of retention (Fig. 4 and 5). Fischer fails to disclose that the wing members are twisted about an associated axis and terminate in a tip portion adapted to engage the first member.

However, Dean teaches a resilient clip having wing members (28,30,32,34). A first wing member (30) twisted about a first axis in a first direction and a second wing member (34) twisted about a second axis in the first direction (C. 2, L. 15-27) (Fig. 3). Each of the wing members terminates at a tip portion that is adapted to engage a first member (Figs. 1 and 3). The wing members are twisted about an associated axis (C. 2, L. 15-27) and terminate at a tip portion that is adapted to engage the first member (Figs. 1 and 3). Although Dean does not provide any advantage from having the wing members twisted, one of ordinary skill in the art will recognize that by having the wing members twisted the extraction of the clip from the first member is difficult due to having the tip portion turned to the outside of the clip and additionally it is well known that the strength of a metal is increased by bending. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members twisted about an associated axis as taught by Dean in the retaining portion of the resilient clip disclosed by Fischer. Doing so, will prevent extraction of the clip from the first member and provide additional strength to the wing members.

The resilient clip taught by Dean has the following:

- Each of the tip portions is angled such that a portion of an associated one of the first and second wing members nearest a centerline of the aperture in the flange portion is longer than a portion of the associated one of first and second wing members farthest from the centerline of the aperture in the flange portion (Fig. 3)
- The tip portion has a flat edge contacting the first member (Fig. 1)

Art Unit: 3677

- Each of the first and second wing members further includes a base portion that is fixedly coupled to an insertion (Figs. 1, 3 and 4). The first and second wing members being twisted such that their tip portion are twisted relative to their base portion by an angle of about 5 degrees to about 45 degrees (Fig. 3).
- The angle is about 30 degrees (Fig. 3).

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Postadan/Dean as applied to claim 2 above, and further in view of Anderson (US 5,251,467).

The combination of Postadan and Dean used for the rejection of claim 2 having all the limitations listed above fails to disclose a plurality of teeth for contacting the structure. However, Anderson shows a cam lock comprising a pair of wing members (25). The wing members initially are shown have an edge with a flat surface for contacting a structure (5,6) (Figs. 5 and 6). Anderson also shows that the wing members have an edge with a plurality of teeth (Fig. 7). The teeth will lock the edges of the wing members against the structure and allow for variations in thickness of the structure. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a plurality of teeth in the edge of the wing members as shown by Anderson in the resilient clip disclosed by Postadan and modified by Dean. Doing so, will lock the edges of the wing members against the structure and allow for variations in the thickness of the structure.

4. Claims 15-17, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Postadan/Dean as applied to claim 1 above, and further in view of Hansz (US 6,179,366 B1) and Ueno (US 5,704,753).

The combination of Postadan and Dean having all the limitations listed above for the rejection of claim 1 fails to disclose a spacing structure having first and second flange members. However, Hansz demonstrates a mounting clip assembly (10) for securing a first member (26) to a second member (12). The clip assembly comprises a resilient clip (58) and a spacing structure (48). The spacing structure has a first flange coupled (52) to the flange portion of the resilient clip. The mounting clip assembly demonstrated by Hansz improves quality because it reduces loose assemblies and is easier to install (C. 2, L. 1-4). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use the a spacing structure as demonstrated by Hansz with the resilient clip disclosed by Postadan and modified by Dean. Doing so, will improve the quality of the installation because the system is easier to install and reduces loose assemblies due to clips not being seated properly.

Regarding to having a spacing structure with a second flange being coupled to an outer edge of the first flange, Ueno shows a connector device for securing a first member (P1) to a second member (P2) (Figs. 9-10(B)). The connector comprises a main body (3) having two flange members (1, 11) coupled to the outer edge of the main body and tapering downwardly toward the retaining portion (8a) and outwardly from the main body (Figs. 2-4 and 6). The flange members can elastically deform to prevent wobbling between the connector and the first or second members (C.6, L. 24-34).

Art Unit: 3677

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a second flange member as shown by Ueno coupled to an outer edge of the flange member demonstrated by Hansz. Doing so, will prevent wobbling between the resilient clip and the first structure.

Hansz demonstrates that the spacing structure is formed by a resilient material (C. 3, L. 21-25).

The resilient material demonstrated by Hansz is plastic (C. 3, L. 21-25).

Hansz discloses that the first flange member has a square shape. But, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a circular shape instead of a square shape because a change in shape of the prior art is considered a design choice. Also, one of ordinary skill in the art will recognize that the first flange member having a circular shape will perform equally as a flange member having a square shape specially since the applicant does not disclose and advantage derived from this shape.

Ueno shows a second flange member that extends entirely around a perimeter of the main body.

5. Claims 28, 29 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dean.

Dean discloses the combination of a resilient engaging a structure (12). The resilient clip comprises a body portion for insertion downwardly into a hole (22) formed in the structure (Fig. 1). The body portion including a plurality of wing members (28,30,32,34) and each of the wing members has a base portion and terminating at a tip

portion that is angled downwardly toward the base (Figs. 1, 3 and 4). Each of the tip portions being twisted about an axis such that an inwardly twisted end of the tip portion is positioned above an outwardly twisted end of the tip portion (Fig. 3). Dean fails to disclose a ratio of insertion force to pull-out force of about 0.04 to about 0.12. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to recognize that the plurality of wing members cooperating with the structure could provide a resilient clip with a ratio of insertion to pull-out force of about 0.04 to about 0.12. And even if the resilient clip does not comply with this ratio, one with ordinary skill in the art will recognize that the ratio could be achieved by changes the dimensions of the prior art until the desired ratio is obtained.

Once again, it would have been obvious to one having ordinary skill in the art at the time the invention of applicant's invention to have a ratio of insertion force to pull-out force of about 0.04 to about 0.10.

6. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dean as applied to claim 28 above, and further in view of Anderson.

Dean discloses a resilient clip having all the limitations listed above for the rejection of claim 28. Dean fails to disclose a plurality of teeth for contacting the structure. However as described above, Anderson shows wing members having an edge with a plurality of teeth. The teeth will lock the edges of the wing members against the structure and allow for variations in thickness of the structure. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a plurality of teeth in the edge of the wing members as shown by



Art Unit: 3677

Anderson in the resilient clip disclosed by Dean. Doing so, will lock the edges of the wing members against the structure and allow for variations in the thickness of the structure.

7. Claims 23, 24, 26, 28, 30, 32, 34-36, 41, 42, 44-46 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer (US 5,919,019) in view of Dean.

Fischer discloses a resilient clip (10) for engaging a structure (14) (Fig. 5). The resilient clip comprising a body portion having a pair of flanges (12), a pair of wing members (44,46) and a pair of abutting members (48). Each of the wing members has a base portion coupled to an associated one of the pair of flanges (Figs. 1, 2 and 4). Each of the wing members terminates at a tip portion (50). The tip portions of the wing members are configured to co-engage a first side of the structure and position a second side of the structure against the abutting members. Fischer fails to disclose that the wing member are twisted about an associated axis and terminate in a tip portion adapted to engage the first member. However as mentioned above, Dean teaches a fastening device comprising wing members twisted about an associated axis in a first direction. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members twisted about an associated axis as taught by Dean in the retaining portion of the resilient clip disclosed by Fischer. Doing so, will prevent extraction of the clip from the first member and provide additional strength to the wing members.

The resilient clip disclosed by Fischer further comprises a flange portion (12) coupled to the body portion. The flange portion including an aperture (16) adapted to

Art Unit: 3677

threadably engage a threaded fastener. Fischer fails to disclose that the aperture includes a helical lip. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a helical lip instead of the sleeve disclosed by Fischer. Since the applicant does not provide any particular reason to use the helical lip instead of sleeve, one having ordinary skill in the art will recognize the interchangeable use of helical lips and sleeves to threadably engage a threaded fastener in resilient clips.

Fischer discloses a resilient clip comprising a body portion for insertion downwardly into a hole (18) formed in the structure (Fig. 5). The body portion includes a plurality of wing members (44,46). Fischer fails to disclose that the wing member are twisted about an associated axis and having a ratio of insertion force to pull-out force of about 0.04 to about 0.12. However as described above, Dean teaches resilient clip having a plurality of wing members. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members twisted about an associated axis as taught by Dean in the retaining portion of the resilient clip disclosed by Fischer. Doing so, will prevent extraction of the clip from the first member and provide additional strength to the wing members. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to recognize that the plurality of wing members cooperating with the structure taught by Dean could provide a resilient clip with a ratio of insertion to pull-out force of about 0.04 to about 0.12. And even if the resilient clip taught by Dean does not comply

Art Unit: 3677

with this ratio, one with ordinary skill in the art will recognize that the ratio could be achieved by changes the dimensions of the prior art until the desired ratio is obtained.

Fischer discloses a resilient clip comprising all the features mentioned above. Fischer fails to disclose that the wing members are twisted about an associated axis. However as mentioned above, Dean teaches resilient clip having a plurality of wing members. Each of the plurality of wing members terminating at a generally flat and continuous edge (Figs. 3 and 4). The flat edge of each tip portion engages the edge of the hole and inhibits relative movement between the resilient clip and the structure in a direction parallel a longitudinal axis of the hole (Figs. 1, 2, 5 and 7). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members twisted about an associated axis as taught by Dean in the retaining portion of the resilient clip disclosed by Fischer. Doing so, will compensate for differences in the thickness of a first member and securely hold a second member against the first member.

Dean discloses that contact between the flat edges and the edges of the hole centers the clip relative to the longitudinal axis of the hole (Figs. 1, 2, 5 and 7).

Fischer discloses a resilient clip (10) for use in securing a first member (28) to a second member (14) (Fig. 5). The resilient clip comprising a flange portion (12), an inserting portion and a retaining portion (44,46,58). The flange portion has an aperture (16) receiving a threaded fastener (26) to couple the second member to the flange portion (Fig. 5). The insertion portion is configured to be inserted into a hole (18) formed into the first member (Fig. 5). The inserting portion is coupled to the flange

portion. The retaining portion is coupled to the insertion portion and has at least three wing members (44,46). The wing members terminate at a tip portion and each tip portion is configured to co-engage the first member (Fig. 5). Fischer fails to disclose that the wing member are twisted about an associated axis and terminate in a tip portion adapted to engage the first member.

However as described above, Dean teaches a fastening device comprising a resilient clip having at least three wing members (28,30,32,34). The wing members are twisted about an associated axis (C. 2, L. 15-27) and terminate at a tip portion that is adapted to engage the first member (Figs. 1 and 3). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members twisted about an associated axis as taught by Dean in the retaining portion of the resilient clip disclosed by Fischer. Doing so, will prevent extraction of the clip from the first member and provide additional strength to the wing members.

The resilient clip disclosed by Fischer has the following:

- The insertion portion is defined by a pair of flanges (36,38) that are spaced apart about a central axis of the resilient clip (Figs. 2 and 4). Each of the flanges having a first portion (between 52 and 54) and a second portion (between 54 and the end of the flange). The first portion is coupled to the flange portion and tapering inwardly toward the central axis (Figs. 2 and 4). The second portion is coupled to an end of the first portion opposite the flange portion and tapering outwardly away from the central axis and upwardly toward the flange (Figs. 2 and 4).

- The insertion portion has a pair of tapered sides that tapers downwardly and inwardly toward the central axis (Figs. 1, 2 and 5)
- The retaining portion includes four wing members (44,46) (Figs. 1, 2, 3 and 5)

Fischer discloses a resilient clip comprising a body portion (30) having a pair of flanges (36,38) and four wing member (44,46) (Figs. 1, 2, 3 and 5). Each of the wing members has a base portion coupled to an associated one of the flanges (Figs. 1, 2 and 4). A first one of the wing members (44) is coupled to one of the flanges (36), a second one of the wing members (46) coupled to the first one of the flanges (36), a third one of the wing members (46) coupled to a second one of the flanges (38) and a fourth one of the wing members (44) coupled to a second one of the flanges (38). Fischer fails to disclose that the wing members are twisted about different axis.

However as described above, Dean teaches a fastening device comprising a resilient clip secured to a structure and having four-wing members (28,30,32,34). A first wing members twisted about a first axis in a first direction, a second wing member twisted about a second axis in a second direction opposite the first direction, a third wing member twisted about a third axis in a first direction and a fourth wing member twisted about a fourth axis in a second direction opposite the first direction (C. 2, L. 15-27) (Fig. 3). Each of the wing members terminates at a tip portion that is adapted to engage first side of the structure to secure the resilient clip to the structure (Figs. 1 and 3). A portion of each of the wing members nearest a central axis of a body portion extends above an associated portion of each of the wing members that is furthest from

Art Unit: 3677

the central axis of the body. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members twisted about an associated axis as taught by Dean in the retaining portion of the resilient clip disclosed by Fischer. Doing so, will compensate for differences in the thickness of a first member and securely hold a second member against the first member.

Fischer also discloses that the first and third wings members are located cross-corner from one another.

8. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer/Dean as applied to claim 23 above, and further in view of Anderson.

The combination of Fischer and Dean used for the rejection of claim 23 having all the limitations listed above fails to disclose a plurality of teeth for contacting the structure. However as mentioned above, Anderson shows that the wing members have an edge with a plurality of teeth. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a plurality of teeth in the edge of the wing members as shown by Anderson in the resilient clip disclosed by Fischer and modified by Dean. Doing so, will lock the edges of the wing members against the structure and allow for variations in the thickness of the structure.

9. Claims 27, 31 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer/Dean as applied to claims 26 and 30 above, and further in view of Hansz and Ueno.

Art Unit: 3677

The combination of Fischer and Dean having all the limitations listed above for the rejection of claims 26, 30 and 36 fails to disclose a spacing structure having first and second flange members. However as described above, Hansz demonstrates a mounting clip assembly comprising a spacing structure. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use the a spacing structure as demonstrated by Hansz with the resilient clip disclosed by Postadan and modified by Dean. Doing so, will improve the quality of the installation because the system is easier to install and reduces loose assemblies due to clips not being seated properly.

Regarding to having a spacing structure with a second flange being coupled to an outer edge of the first flange, Ueno shows a connector device comprising a main body having two flange members. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a second flange member as shown by Ueno coupled to an outer edge of the flange member demonstrated by Hansz. Doing so, will prevent wobbling between the resilient clip and the first structure.

10. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer/Dean as applied to claim 42 above, and further in view of Postadan et al. (US 6,095,734).

The combination of Fischer and Dean used for the rejection of claim 42 having all the limitations mentioned above fails to disclose a fastener aperture in the first and second portions. However, Postadan demonstrates a resilient clip (100) having a

Art Unit: 3677

fastener aperture (28) formed into the first and second portions. The aperture also provides clearance for a fastener (22). The hole is provided to simplify the manufacturing process of the clip (C. 4, L. 35-38). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a fastener aperture formed in the first and second portions as demonstrated by Postadan in the resilient clip disclosed by Fischer and modified by Dean. Doing so, will simplify the manufacturing process of the clip and reduce the amount of material required for the clip.

11. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer/Dean as applied to claim 46 above, and further in view of Anderson (US 5,251,467).

The combination of Fischer and Dean used for the rejection of claim 46 having all the limitations listed above fails to disclose a plurality of teeth for contacting the structure. However as described above, Anderson shows a cam lock comprising a pair of wing having an edge with a plurality of teeth. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a plurality of teeth in the edge of the wing members as shown by Anderson in the resilient clip disclosed by Fischer and modified by Dean. Doing so, will lock the edges of the wing members against the structure and allow for variations in the thickness of the structure.

12. Claims 49-53, 55 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wisniewski (US 6,141,837) in view of Dean.



Wisniewski discloses a resilient clip (22) for engaging a first structure (24) to a second structure (26). The resilient clip comprises a body portion having a pair of flanges (44,46) and first and second wing members (70,72). Each of the wing members has a base portion coupled to an associated one of the flanges and terminated at a tip portion (Figs. 1-3). Each of the tip portions engages a first side of the first structure to secure the resilient clip to the second structure (Fig. 1). Wisniewski fails to disclose that the wing members are twisted about an axis.

However as described above, Dean teaches a resilient clip for engaging a first structure to a second structure. The resilient clip comprising a pair of flanges (20) and wing members (28,30,32,34). Each of the wing members has a base portion coupled to an associated one of the flanges (Fig. 4). A first wing member (30) twisted about a first axis in a first direction and a second wing member (34) twisted about a second axis in the first direction (C. 2, L. 15-27) (Fig. 3). Each of the wing members terminates at a tip portion that is angled downwardly toward the base portion such that a portion of each of the wing members nearest the central axis of the body portion extends above the associated portion of each of the wing members that is furthest from the central axis of the body (Fig. 3). The tip portions are configured to engage a first side of a second structure to secure the resilient clip to the second structure. Although Dean does not provide any advantage from having the wing members twisted, one of ordinary skill in the art will recognize that by having the wing members twisted the extraction of the clip from the first member is difficult due to having the tip portion turned to the outside of the clip and additionally it is well known that the strength of a metal is increased by bending.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members twisted about an associated axis as taught by Dean in the retaining portion of the resilient clip disclosed by Wisniewski. Doing so, will prevent extraction of the clip from the first member and provide additional strength to the wing members.

The resilient clip disclosed by Wisniewski also comprises the following:

- An engagement portion having a plurality of teeth (62,64) extending inwardly toward the central axis of the body portion and downwardly toward the base portion of the wing members (Figs. 1-3). The plurality of teeth is configured for engaging the first structure (Fig. 1).
- The body portion is generally U-shaped (Figs. 1-3).
- The teeth are generally triangular in shape (Fig. 2 and 4).

Wisniewski discloses in combination, a resilient clip (22) for coupling a first structure (24) to a second structure (26). The first structure includes a fastening tab (38). The second structure includes a clip aperture (28). The resilient clip includes a body portion and an engagement portion. The body portion includes a pair of flanges and first and second wing members. The engagement portion has a plurality of teeth having all the features disclosed above and configured for engaging the first structure. Wisniewski fails to disclose that the wing members are twisted about an axis. However as described above, Dean teaches a resilient clip comprising wing members having all the features described above. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wing members

Art Unit: 3677

twisted about an associated axis as taught by Dean in the retaining portion of the resilient clip disclosed by Wisniewski. Doing so, will compensate for differences in the thickness of a first member and securely hold a second member against the first member.

13. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wisniewski/Dean as applied to claim 53 above, and further in view of DeWitt (US 5,367,751).

The combination of Wisniewski and Dean used for the rejection of claim 53 having all the limitations mentioned above fails to disclose the fastening tab includes a pair of abutting flanges to inhibit the resilient clip from sliding laterally relative to the fastening tab. However, DeWitt demonstrates in combination, a resilient clip (30) for coupling a first structure (10) to a second structure (12). The first structure includes a fastening tab (16). The fastening tab includes a pair of abutting flanges (18) to inhibit the resilient clip from sliding laterally relative to the fastening tab (Fig. 4). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a fastening tab including a pair of abutting flanges as demonstrated by DeWitt in combination with the resilient clip disclosed by Wisniewski and modified by Dean. Doing so, will prevent the movement of the resilient clip relative to the fastening tab.

***Allowable Subject Matter***

14. Claims 38-40 allowed.

Art Unit: 3677

15. Claims 3, 4, 9-14, 18, 19 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

16. Applicant's arguments with respect to claims 1, 2, 5-8, 15-17, 20, 21, 23-37 and 41-56 have been considered but are moot in view of the new ground(s) of rejection.

17. The main argument presented by the Applicant for the rejection of all claim is based on the patent document by Dean. This argument fails to persuade. The Examiner acknowledges that the patent document by Dean teaches that the fastener compensates for differences in thickness of the first structure by having a plurality of wing members having different lengths. However, the Examiner now takes notice of the fact that it is well known in the art to provide additional strength to metal by twist or bend the metal. Additionally, the configuration of the twisted members where the outermost tip portion of the tip portion lays next to the first structure deters the extraction of the clip from the first structure. Therefore, claims 1, 2, 5-8, 15-17, 20, 21 and 23-56 remain rejected under 35 U.S.C. 103 (a) as presented above.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 3677

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wiley (US 2,217,781), Poutpitch (US 2,509,192), Meyer (US 2,959,259), Osterland et al. (US 4,630,338), Kuffel (US 5,759,004), Cornell et al. (US 5,774,949) and Danby et al. (US 5,873,690) are cited to show state of the art with respect to resilient clips having some of the features disclosed by the current invention.

Hirohata (US 4,668,145) is cited to show state of the art with respect to a flange extending around the periphery of the main body of a fastener.

Van Order et al. (US 5,636,891) is cited to show state of the art with respect to the use of spacing structures and resilient clips.

Art Unit: 3677

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C Rodriguez whose telephone number is (703) 308-1881. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (703) 306-4115.

Submissions of your responses by facsimile transmission are encouraged. Technology center 3600's facsimile number for before final communications is (703) 872-9326. Technology center 3600's facsimile number for after final communications is (703) 872-9327.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Ruth C. Rodriguez  
Patent Examiner  
Art Unit 3677

**RCR**  
rcr  
July 1, 2002

  
ROBERT J. SANDY  
PRIMARY EXAMINER